

REMARKS

Claims 1-20 were originally filed and are currently pending in this application.

Claims 1, 2, 6-10, 14 and 15 have been rejected.

Claims 3-5, 11-13, 16 and 17 have been objected to.

Claims 1-20 are therefore pending.

I. **DISPOSITION OF CLAIMS**

The Office Action states that Claims 1-17 are currently pending. This is incorrect.

Claims 1-20 are currently pending. The Office Action is silent with regards to the disposition of Claims 18, 19 and 20.

II. **ALLOWABLE SUBJECT MATTER**

The Applicants thank the Examiner for indicating that Claims 3-5, 11-13, 16 and 17 would be allowable. Because the Applicants believe that the remaining claims in this application are allowable, the Applicants have not rewritten Claims 3-5, 11-13, 16 and 17 in independent form. Claims 3-5, 11-13, 16 and 17 have not been amended and therefore remain in condition for allowance.

III. **REJECTION UNDER 35 U.S.C. §102**

Claims 1, 2, 6-10, 14 and 15 were rejected under 35 U.S.C. §102(e) as being anticipated by *Kuiri, et al.* (U. S. Pat. App. Pub. No. 2004/0142674 A1, hereinafter *Kuiri*). The aforementioned rejection is respectfully traversed.

A prior art reference anticipates the claimed invention under 35 U.S.C. § 102 only if every element of a claimed invention is identically shown in that single reference, arranged as they are in the claims. MPEP § 2131, p. 2100-76 (8th ed., rev. 4, October 2005)(citing *In re Bond*, 910 F.2d 831, 832, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990)). Anticipation is only shown where each and every limitation of the claimed invention is found in a single prior art reference. *Id.* (citing *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987)).

Kuiri teaches a direct conversion receiver (DCR) having a low noise amplifier for amplifying a received RF signal and for outputting the amplified RF signal to a down-conversion current-switching mixer. Paragraph [0011]. The current-switching mixer processes the RF signal in the current mode and process a local oscillator signal in the voltage mode. Paragraph [0015]. Specifically, the respective collectors of the RF input transistors are connected to the emitters of the differential transistor pairs of the mixer cores. Paragraph [0025]. The respective base terminals are connected to the differential LO input signals, LO+ and LO-. Paragraph [0028]. *Kuiri* goes on to teach that the output currents from the current-switching mixer are connected to the virtual ground node of an operational amplifier. Paragraph [0024]. Because of feedback, both inputs to the operational amplifier are at the same DC potential, and differential currents are forced to go through a feedback circuitry. *Id.* The feedback circuitry includes an active low pass filter whose low pass corner frequency is inversely proportional to the product of a resistor and a capacitor coupled in parallel. Paragraphs [0015] & [0025].

There is, however, no teaching or disclosure within *Kuiri* of mixing input signals with

harmonic gating suppression of harmonic responses to the switching mixing, as required by Claim 1. Likewise, there is no teaching or disclosure within *Kuiri* of employing one or more switching devices to perform switching mixing of input signal with *harmonic gating suppression of harmonic responses to switching mixing*, as required by Claim 9. Similarly, there is no teaching or disclosure within *Kuiri* of a mixing stage to perform switching mixing on the input current with *harmonic gating suppression of harmonic responses to the switching mixing*, as required by Claim 15.

For these reasons, *Kuiri* fails to anticipate the Applicants' invention as recited in Claims 1, 9 and 15 (and their dependent claims). Accordingly, the Applicants respectfully request withdrawal of the §102 rejection and full allowance of Claims 1, 2, 6-10, 14 and 15.

CONCLUSION

As a result of the foregoing, the Applicant asserts that the remaining Claims in the Application are in condition for allowance, and respectfully requests an early allowance of such Claims.

If any issues arise, or if the Examiner has any suggestions for expediting allowance of this Application, the Applicant respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at wmunck@munckbutrus.com.

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Deposit Account No. 50-0208.

Respectfully submitted,

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